FIG. 1

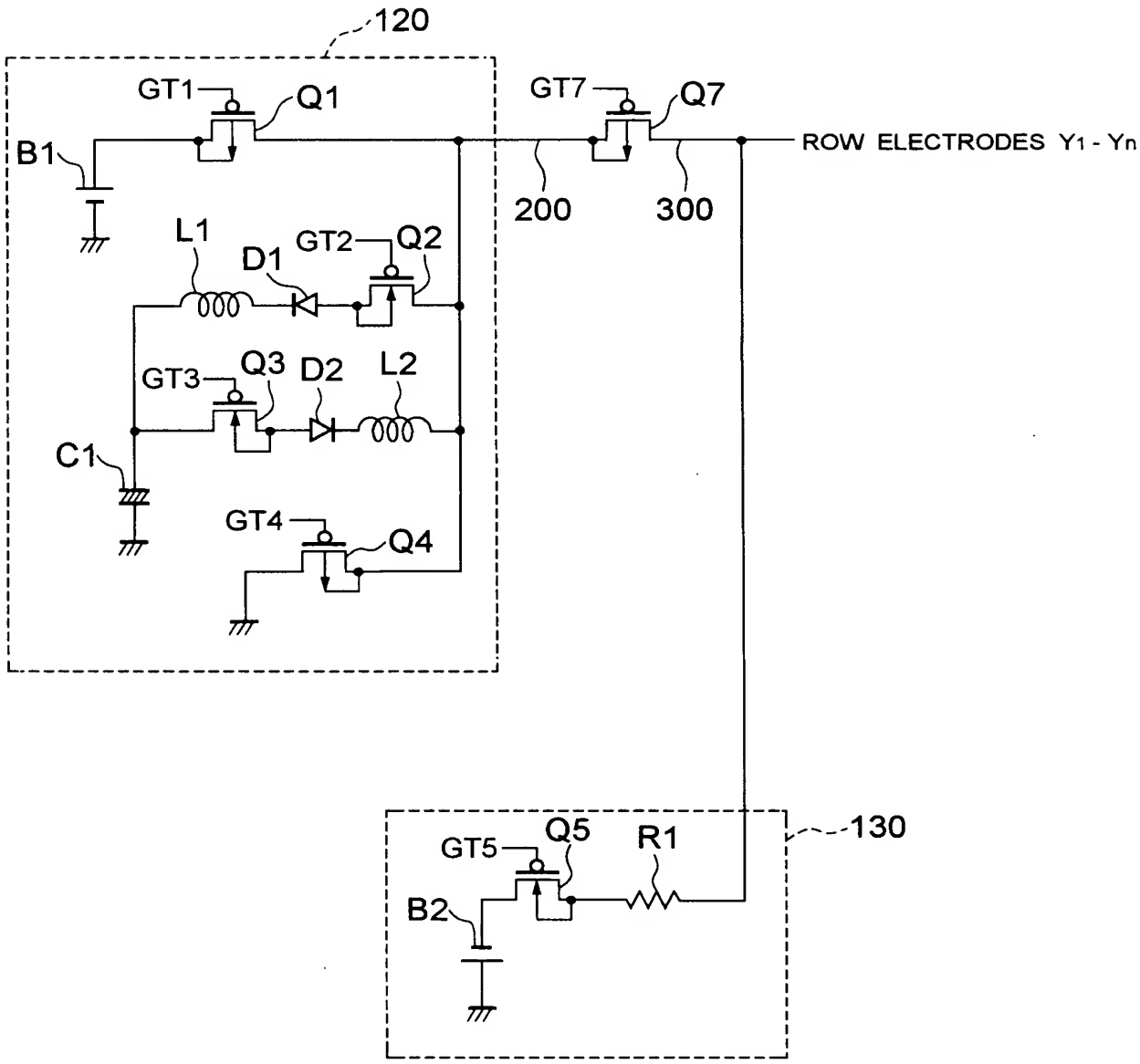
120
GT1
Q1
B1
L1
D1
GT2
Q2
GT3
Q3
D2
L2
C1
GT4
Q4
GT7
Q7
ROW ELECTRODES Y1 - Yn
200
300
130
GT5
Q5
R1
B2

FIG. 2

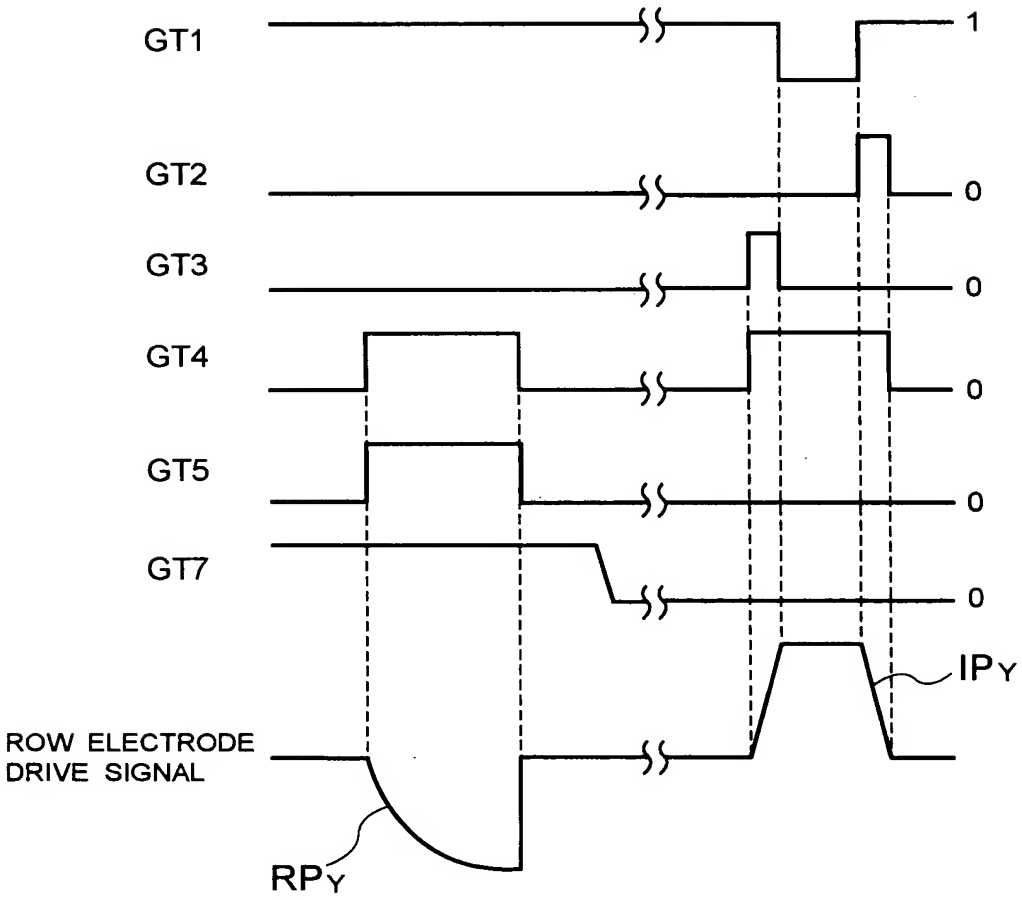
GT1
1
GT2
0
GT3
0
GT4
0
GT5
0
GT7
0
IPY
ROW ELECTRODE
DRIVE SIGNAL
RPY

FIG. 3

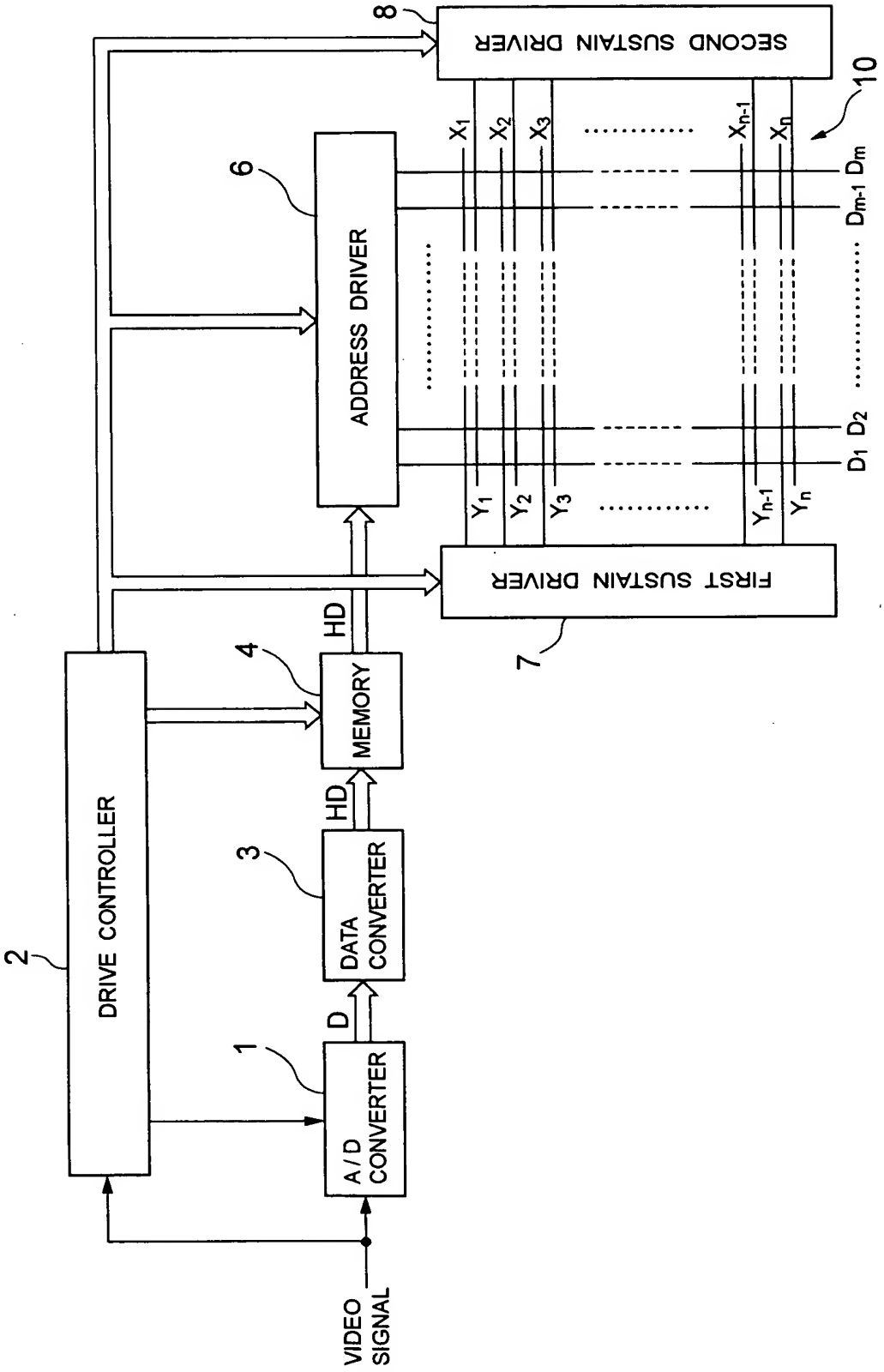
VIDEO SIGNAL
A/D CONVERTER
1
D
DATA CONVERTER
3
HD
MEMORY
4
HD
DRIVE CONTROLLER
2
FIRST SUSTAIN DRIVER
7
ADDRESS DRIVER
6
SECOND SUSTAIN DRIVER
8
10
X1 X2 X3 ..... Xn-1 Xn
Y1 Y2 Y3 ..... Yn-1 Yn
D1 D2 ..... Dm-1 Dm

FIG. 4

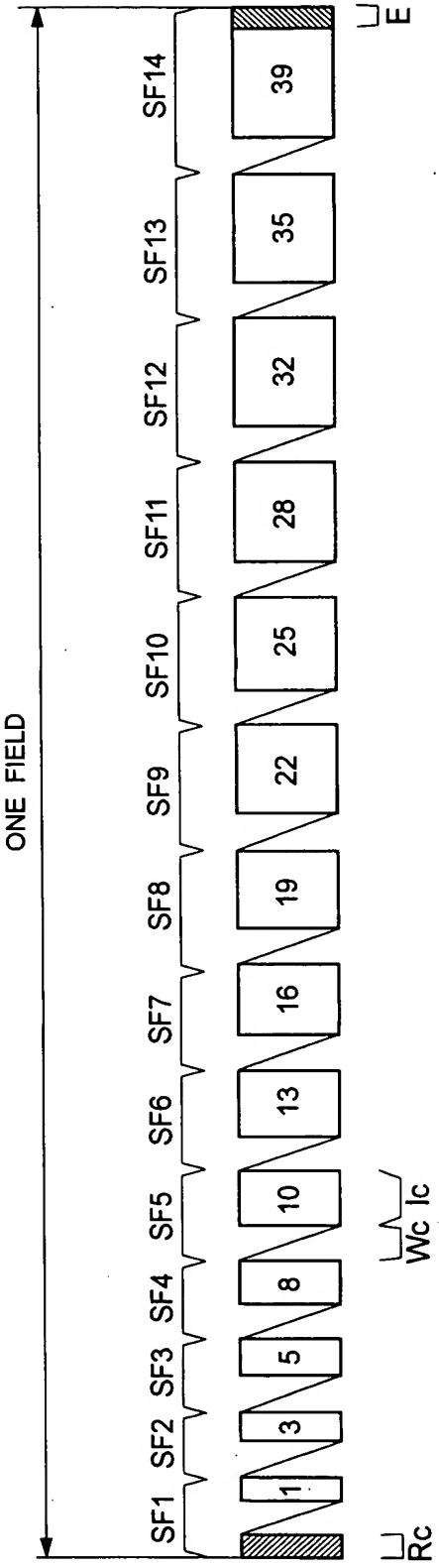
ONE FIELD
SF1
SF2
SF3
SF4
SF5
SF6
SF7
SF8
SF9
SF10
SF11
SF12
SF13
SF14
1
3
5
8
10
13
16
19
22
25
28
32
35
39
Rc
Wc
Ic
E

FIG. 5

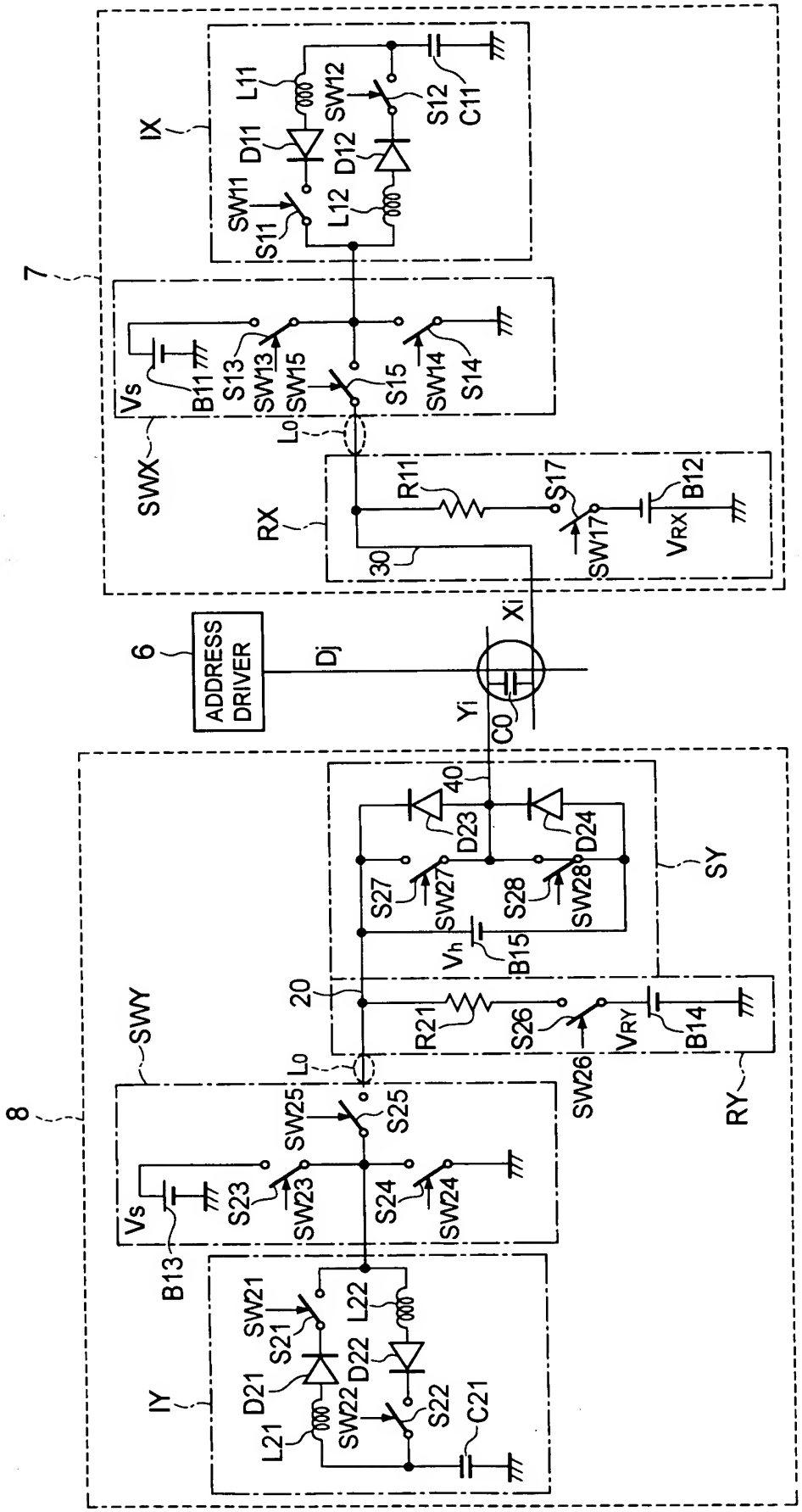
IX
L11
SW12
S12
C11
D11
D12
SW11
S11
L12
7
Vs
B11
S13
SW13
SW15
S15
SW14
S14
SWX
L0
RX
R11
S17
SW17
B12
VRX
30
6
ADDRESS DRIVER
Dj
Xi
Yi
C0
8
SWY
40
D23
D24
S27
SW27
S28
SW28
SY
Vh
B15
20
R21
S26
SW26
VRY
B14
RY
L0
SW25
S25
S23
SW23
S24
SW24
Vs
B13
IY
SW21
L22
S21
D22
D21
SW22
S22
C21
L21

FIG. 6

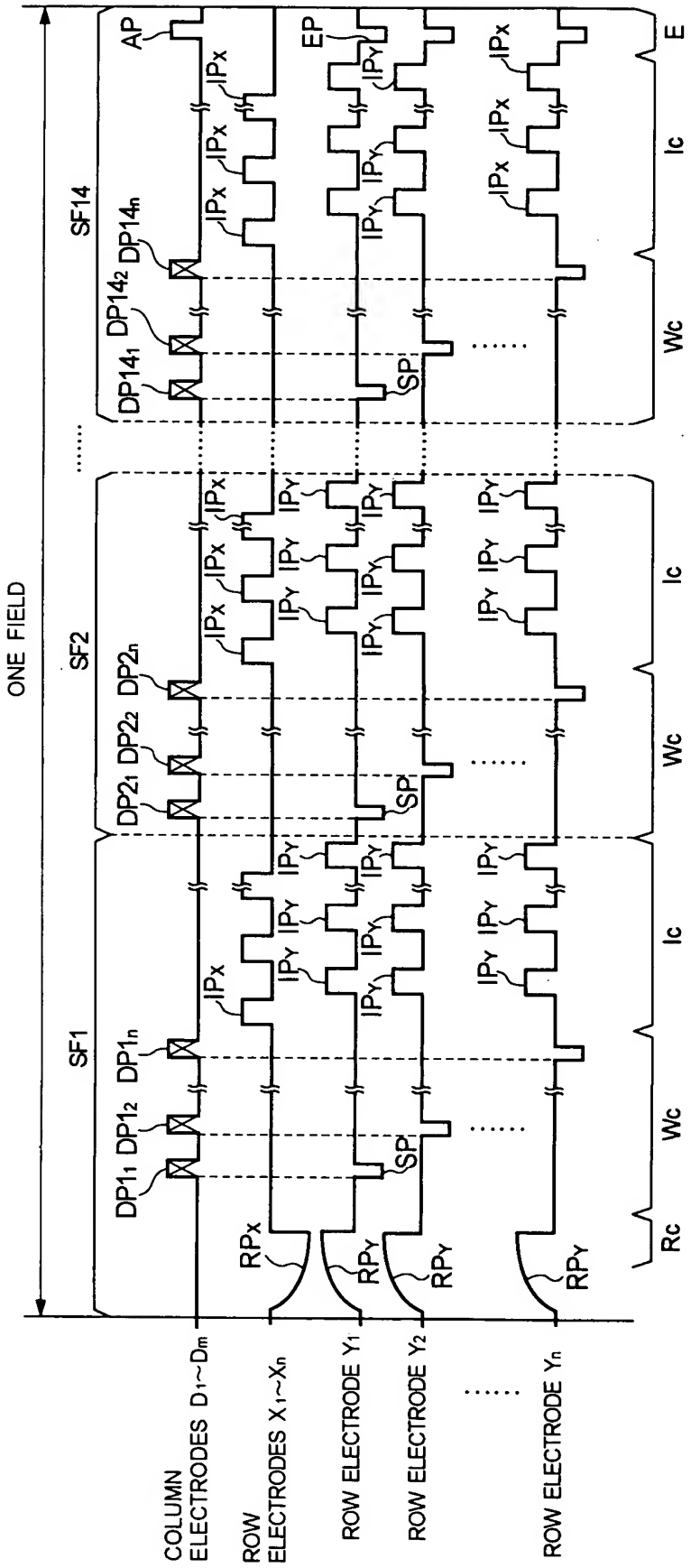
ONE FIELD
SF1
SF2
SF14
AP
EP
E
Ic
Wc
Rc
IPx
IPy
RPx
RPy
SP
DP1n
DP12
DP11
DP2n
DP22
DP21
DP14n
DP142
DP141
COLUMN ELECTRODES D1~Dm
ROW ELECTRODES X1~Xn
ROW ELECTRODE Y1
ROW ELECTRODE Y2
ROW ELECTRODE Yn

FIG. 7

Ds	HD														ONE FIELD EMISSION DRIVE PATTERN														EMISSION INTENSITY
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	SF 1	SF 2	SF 3	SF 4	SF 5	SF 6	SF 7	SF 8	SF 9	SF 10	SF 11	SF 12	SF 13	SF 14	
0000	1	0	0	0	0	0	0	0	0	0	0	0	0	0	●														0
0001	0	1	0	0	0	0	0	0	0	0	0	0	0	0	○	●													1
0010	0	0	1	0	0	0	0	0	0	0	0	0	0	0	○	○	●												4
0011	0	0	0	1	0	0	0	0	0	0	0	0	0	0	○	○	○	●											9
0100	0	0	0	0	1	0	0	0	0	0	0	0	0	0	○	○	○	○	●										17
0101	0	0	0	0	0	1	0	0	0	0	0	0	0	0	○	○	○	○	○	●									27
0110	0	0	0	0	0	0	1	0	0	0	0	0	0	0	○	○	○	○	○	○	●								40
0111	0	0	0	0	0	0	0	1	0	0	0	0	0	0	○	○	○	○	○	○	○	●							56
1000	0	0	0	0	0	0	0	0	1	0	0	0	0	0	○	○	○	○	○	○	○	○	●						75
1001	0	0	0	0	0	0	0	0	0	1	0	0	0	0	○	○	○	○	○	○	○	○	○	●					97
1010	0	0	0	0	0	0	0	0	0	0	1	0	0	0	○	○	○	○	○	○	○	○	○	○	●				122
1011	0	0	0	0	0	0	0	0	0	0	0	1	0	0	○	○	○	○	○	○	○	○	○	○	○	●			150
1100	0	0	0	0	0	0	0	0	0	0	0	0	1	0	○	○	○	○	○	○	○	○	○	○	○	○	●		182
1101	0	0	0	0	0	0	0	0	0	0	0	0	0	1	○	○	○	○	○	○	○	○	○	○	○	○	○	●	217
1110	0	0	0	0	0	0	0	0	0	0	0	0	0	0	○	○	○	○	○	○	○	○	○	○	○	○	○	○	255

BLACK CIRCLE : SELECTIVE ERASE DISCHARGE
HOLLOW CIRCLE : EMISSION

FIG. 8

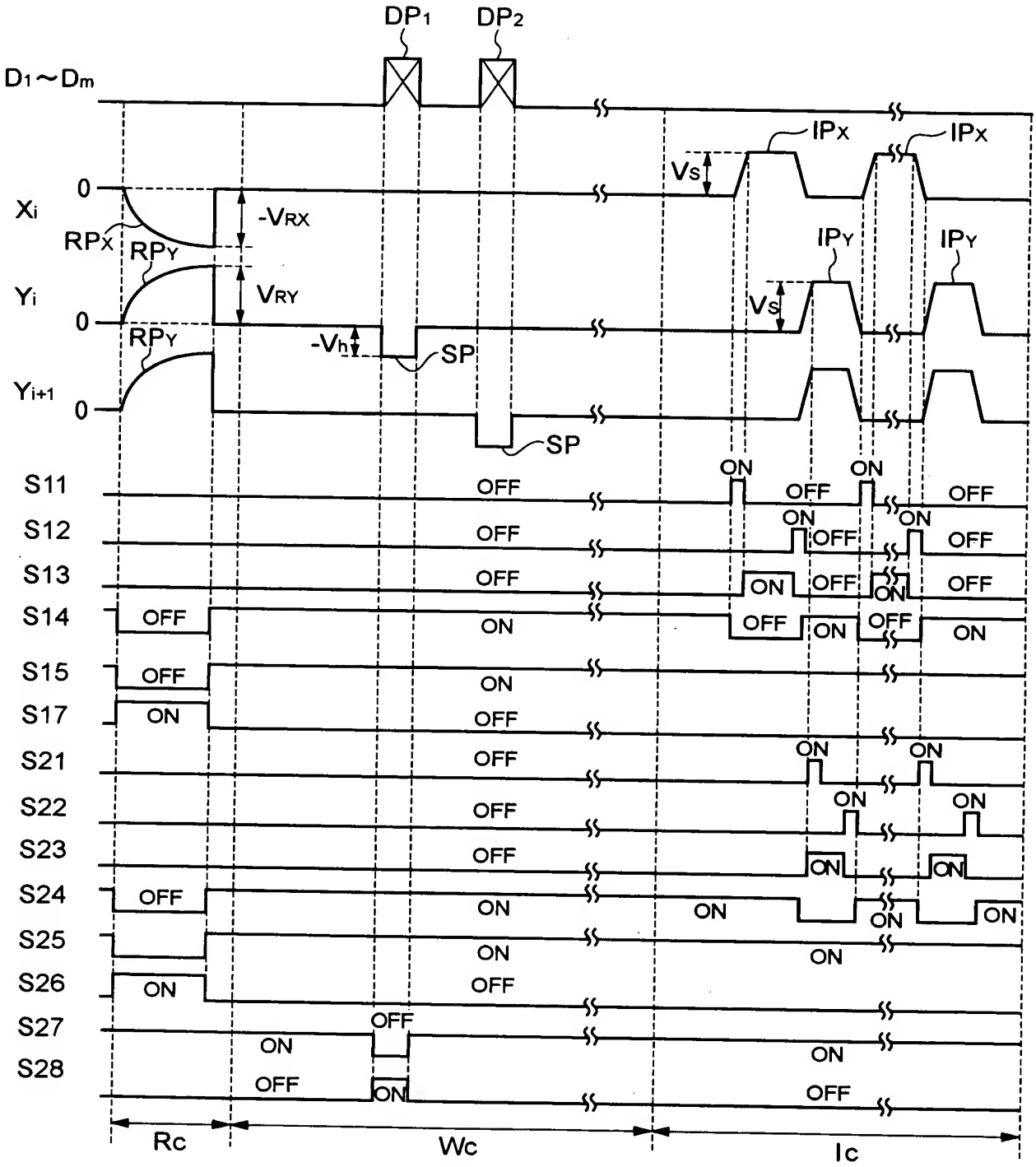
DP1
DP2
D1~Dm
IPX
IPX
Vs
0
Xi
-VRX
RPX
RPY
IPY
IPY
Yi
VRY
Vs
0
RPY
-Vh
SP
Yi+1
0
SP
S11
S12
S13
S14
S15
S17
S21
S22
S23
S24
S25
S26
S27
S28
OFF
ON
Rc
Wc
Ic

FIG. 9A

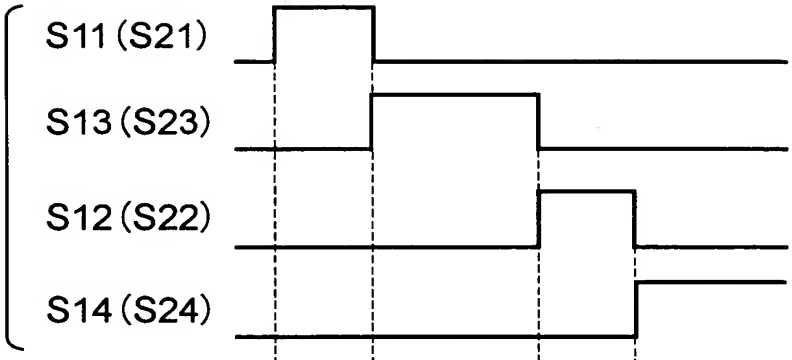

FIG. 9B

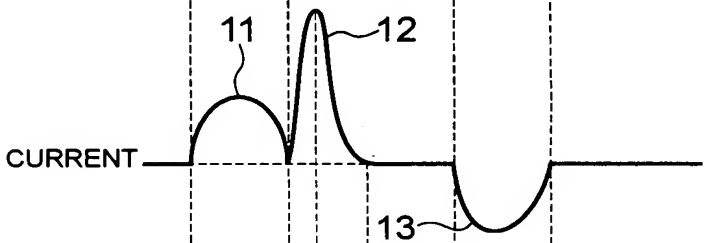

FIG. 9C

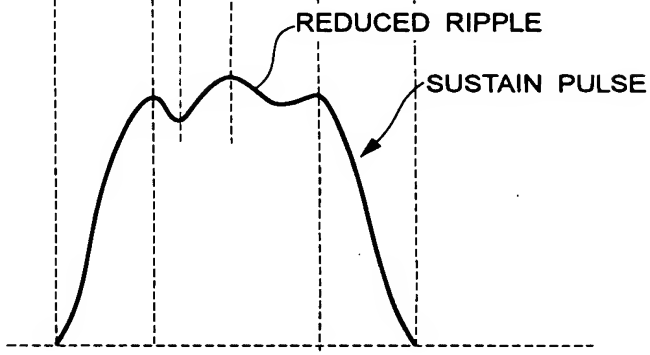
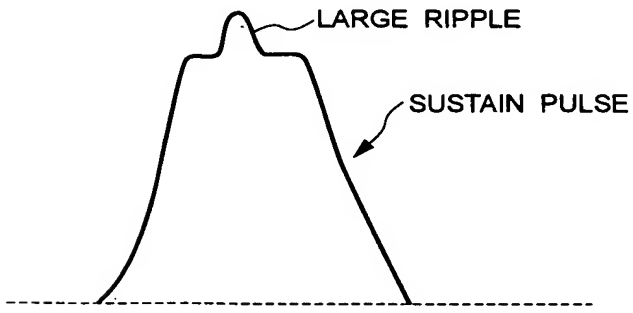
FIG. 9D